Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) C1 inhibitor which is characterised in that its plasma circulatory half-life has been changed by modification of an O-linked carbohydrate.

2. (Original) C1 inhibitor according to claim 1 which is characterised in that its plasma circulatory half-life has been extended compared to the half-life of unmodified C1 inhibitor.

3. (Original) C1 inhibitor according to claim l which is characterised in that its plasma circulatory half-life has been reduced compared to the half-life of unmodified C1 inhibitor.

4. (Previously Presented) C1 inhibitor according to claim 1, which is characterised in that the plasma circulatory half-life of the modified inhibitor has decreased with or increased to at least 1.5, 2, 3 or 4 times the value of the half-life of the-unmodified inhibitor.

5. (Previously Presented) C1 inhibitor according to claim 1, which is characterised in that the modification comprises sialylation of the O-linked carbohydrate or the removal of one or more non-sialylated O-linked carbohydrates.

6. (Currently Amended) C1 inhibitor according to claim 5, which is characterised in that the non- sialylated O-linked carbohydrate is galactose or Gal(β[[•]]1-3)GalNAc.

7. (Previously Presented) C1 inhibitor according to , which claim 1 is characterised in that the O-linked carbohydrate is modified by incubation with an enzyme preparation which comprises one or more enzymes.

8. (Original) C1 inhibitor according to claim 7, which is characterised in that the enzyme preparation comprises one or more sialyltransferases, galactosidases or endo-acetyl-galactosaminidases.

9. (Original) C1 inhibitor according to claim 8 which is characterised in that the enzyme preparation comprises sialyltransferases ST3Gal III and ST3Gal I, or endo-α-N-acetyl-galactosaminidase.

10. (Previously Presented) C1 inhibitor according to claim 1, which is characterised in that the modification is an *in vitro* modification.

11. (Previously Presented) C1 inhibitor according to claim 1, which is characterised in that the C1 inhibitor is human C1 inhibitor.

12. (Previously Presented) C1 inhibitor according to claim 1 which is characterised in that the C1 inhibitor is recombinantly produced.

13. (Previously Presented) A pharmaceutical composition comprising C1 inhibitor according to claim 1.

14-15. (Canceled)

16. (Currently Amended) A method for extending the blood circulatory half-life of a glycoprotein or of a glycoprotein comprising compound, wherein the method comprises removing one or more non sialylated O-linked carbohydrates from the glycoprotein, wherein the one or more non sialylated O-linked carbohydrate is removed *in vitro* incubation with an enzyme preparation comprising one or more enzymes or *in vivo* by co-expression of one or more enzymes in a cell or a non-human transgenic animal.

17. (Original) The method according to claim 16 wherein the non-sialylated carbohydrate is galactose or Gal(β1-3)GalNAc.

18. (Previously Presented) The method according to claim 16 wherein the carbohydrates are removed by *in vitro* incubation with an enzyme preparation comprising one or more enzymes.

19. (Original) The method according to claim 18, wherein the enzyme preparation comprises galactosidase or endo-acetylgalactosaminidase.

20. (Previously Presented) The method according to claim 18 wherein the enzyme preparation comprises one or more recombinantly produced enzymes.

21. (Currently Amended) The method according to claim 16, wherein the carbohydrates are removed **[[by]]** *in vivo* by expression of a nucleic acid encoding a galactosidase or an endo-acetylgalaotosaminidase.

22. (Previously Presented) The method according to claim 16, wherein the glycoprotein is C1 inhibitor.